

Commentaries

Legalization of Eco-balances in Germany

Eckard Rehbinder

Correspondance address: Prof. Dr. Eckard Rehbinder, Professur für Wirtschaftsrecht, Umweltrecht und Rechtsvergleichung, FB Rechtswissenschaft, Johann Wolfgang Goethe-Universität, Senckenberganlage 31, D-60054 Frankfurt/M.

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Abstract. The development and use of, as well as scientific discussions on, eco-balances and in particular life cycle assessment has largely occurred without involving experts on environmental law. However, in the light of recent proposals to 'legalize' eco-balances, i.e. formally introducing them into environmental law, the legal implications of eco-balancing must be addressed in the future. The formal introduction, especially of LCA, cannot be decided independent of the general economic and environmental policy implications of material flow management, and it raises major questions of policy and constitutional law. An important question of principle is whether eco-balances should be prescribed or only a legal framework set forth for voluntary use. In view of the unfinished methodological development of LCA, any formal introduction raises the constitutional problem of conformity with the requirements of legal certainty. References to the 'principles of good eco-balancing' are problematic, and an introduction on an experimental basis would have to be confined to cases where the legal consequences of grossly divergent interpretations of this term are tolerable to affected firms. Where eco-balances are prescribed as a method of preparing governmental or administrative decisions, one must determine whether and to what extent they are binding on the decision-maker, and develop proper mechanisms of participation, transparency and critical review.

Keywords: Constitutional law; eco-balance; enterprise-related eco-balance; environmental law; experimental legislation; ISO 14040; legal certainty; legalization; Life Cycle Assessment (LCA); material flow management; methods of eco-balancing; participation; product-related eco-balance; trade secrets; voluntary model of eco-balancing

Introduction

Eco-balances have been put to use for the past 30 years. For many years and even today, no methodological rules with regard to eco-balances have existed, which has led to many different types of studies being defined as an eco-balance. In Germany the term 'eco-balance' (Ökobilanz) has been used, on the one hand, as a collective term to describe all kinds of ecology-related balancing, including eco-balances related to products and enterprises as well as regions. On the other hand, it has been used synonymously for certain types of balancing, especially life cycle assessments (in the following called LCA). Despite the definitions set forth by DIN EN ISO 14040 for product-related eco-balances, such lack of terminological restriction still persists. For this reason, the

term eco-balance is used in this article for all types of ecological balancing irrespective of their object (e.g. product, enterprise, process).

With the adoption of the ISO 14040 family internationally recognized methodological rules on LCA exist or will shortly exist for the very first time. Nevertheless, ISO 14040 states in some parts that the methodological development is only beginning; the norm implies that a well-founded scientific development taking account of experience obtained in product-related eco-balances is still necessary. In addition, LCAs, in keeping with ISO 14040, may vary severely as to their depth and/or actual scope. A fair number of opening clauses and 'soft' formulations – in addition to the explicit restrictions contained in the norm – has the result that LCAs actually carried out are not easily comparable.

This article, which is based on a study carried out by the author and a collaborator for the German Environmental Agency (Rehbinder and Schmieling 2000), explores the (potential) legal role of eco-balances, i.e. their status as an instrument of environmental law. Although, in the light of the still inchoate nature of eco-balances, one could sustain that it is premature for lawyers to join the discussion, it will be shown that it is time for a first consideration of legal issues that emerge or will emerge with the foreseeable integration of eco-balances into the system of environmental law.

1 Eco-balances as an Instrument of German Environmental Law

In countries such as Japan, the Netherlands, Switzerland and the United States, to this day, the existing methodological uncertainties, lack of experience and incomplete regulation have prevented LCAs from being applied as a obligatory instrument of environmental law. However, eco-balances in Germany have recently become the subject of legal discussion that could lead to their formal introduction as an instrument of environmental law.

LCAs already play a certain role in the law on waste management. This is true of the choice among waste management options as well as the producer's responsibility to consider the whole product life cycle in designing new products. Furthermore, the requirements for the grant of the eco-label constitute framework conditions for a voluntary use of LCAs. However, apart from the rather limited obligation of operators of certain facilities to carry out a facility-based waste balance (Paragraph 19 of the Life Cycle Economy and Waste

Act), these provisions do not require a formal LCA. As regards eco-balances for the whole enterprise, these are not yet a well-established part of German environmental law, although they could be integrated in the eco-audit scheme.

The proposals for a German environmental code, submitted by an independent expert commission in 1997 (Environmental Code Draft 1998), mark a departure from the previous procedure of informality and voluntariness. They aim to set forth genuine obligations of enterprises to carry out LCAs for their products. Under the proposed environmental code, the Government would be empowered to designate new as well as existing products for which an LCA would be required. The results of the LCA must be considered in designing and manufacturing these products. LCA also plays a major role in various proposals for creating a legal framework for material flow management which has been developed outside the discussion on an environmental code; in these latter proposals, life cycle analysis primarily serves as a requirement for governmental or administrative decisions and only secondarily as an obligation of firms (e.g. Brandt and Röckeisen 2000; Kuck and Riehl 2000).

2 Fundamental Issues of Legalising Eco-balances

With the proposals for a German environmental code, the question of 'legalizing' eco-balances, i.e. of formally introducing them into the system of environmental law, is on the agenda. Is it appropriate to deviate from the previous procedure of informality and voluntariness? What kind of constitutional and other legal issues would be raised? Which are the implementation problems associated with the introduction of eco-balance obligations? In discussing these questions, LCAs and enterprise-related eco-balances must be distinguished.

The formal introduction of LCA cannot be decided independent of the general economic and environmental policy implications of material flow management in the framework of sustainable development. The question is whether material flows as such or rather environmental problems associated with such flows should be addressed, whether a material policy should be interventionistic or market-oriented, and at which hierarchic level the intervention should occur. LCA is a mere instrument of environmental policy. The preliminary question as to the appropriate environmental policy must be settled before one can decide on the formal introduction of LCA as an instrument. For the purposes of further discussion, it is assumed that LCA – to a more or less extensive degree and relating to all or only higher hierarchical levels of material flows – makes sense, in principle, in environmental policy. The emphasis is laid on the resulting legal issues.

Enterprise-related eco-balances are close to the disclosure of balance sheets by corporations which, besides the information of investors, also aim to inform the public at large about the financial situation of enterprises. Likewise, one can postulate that enterprises should not only be accountable to the public at large as to how they conduct their businesses, but rather, also as to how they adversely affect the environment. Thereby, the environment-related decisions within the firms would be exposed to public scrutiny and the environmentally friendly conduct of business is promoted.

A certain problem in this connection is posed by an excess of reporting requirements where the enterprises are also subject to a system of LCA.

3 Obligation vs. Voluntariness

An important question of principle regarding the legalization of eco-balances is whether eco-balances should be prescribed or only a legal framework set forth for voluntariness. This question is of particular importance regarding eco-balances which are to be prepared by enterprises. The problem of voluntariness has been broadly discussed in the framework of the eco-audit scheme. Not all of the arguments sustained in this debate in favor of voluntariness can be transferred to eco-balances. In particular, it would seem that the incentives for voluntary eco-balances are less than in the case of eco-audits. Nevertheless, the EC Eco-Audit Regulation constitutes a prejudicial decision in favor of voluntary models, at least in the case of enterprise-related eco-balances. However, even independent of this prejudicial decision, the introduction of enterprise obligations to carry out eco-balances for products – having three different functions, namely controlled self-regulation, information of users, obligation towards the authority in the framework of governmental or administrative decisions – must be viewed with some scepticism. If at all, such obligations might be considered in the framework of controlled self-regulation.

Moreover, the question arises whether eco-balances should be institutionalized as a methodological instrument for preparing governmental or administrative decisions on substances, products or waste. Apart from environmental impact assessment which is related to individual decisions, existing German law has as yet renounced to setting forth methodological requirements for the process of preparing regulations and administrative rules. There are no rules which require cost benefit or cost effectiveness analysis although one may sustain that the established principle of proportionality implies such analysis in a material sense. Therefore, the introduction of formal eco-balance obligations would constitute a decision based on principle which cannot be discussed only as to eco-balances. The fact that formal eco-balance obligations would lead to a severe restriction of the political discretion normally vested in the executive or administration militates against such obligations. However, the introduction of eco-balance obligations could be advocated as regards the grant of eco-labels.

4 Constitutional Issues

The statutory introduction of eco-balances, if it were politically intended, would raise quite a number of questions of – predominantly – constitutional law. These questions vary as regards the different possible legal forms of introducing eco-balances. These legal forms range from a comprehensive statutory regulation via setting forth broad statutory terms referring to the 'principles of good eco-balancing' or corresponding empowerments to concretize these terms to a pure model of self-regulation. Under the perspective of legal certainty required by the rule of law as well as the democratic principle, a reference to the 'principles of good eco-balanc-

ing' is problematic. It is true that there are good reasons for using such a broad statutory term. However, it is doubtful whether the term has a normative content which can be determined by interpretation, including, if necessary, expert opinion. In view of the fact that the methodological development of life cycle assessment has not yet come to a conclusion, even not by the standards of the ISO 14040 family, there are good arguments that militate for a negative answer. However, when eco-balances are simply used as a method for preparing governmental or administrative decisions, the objections based on lack of legal certainty have a lower weight. Corresponding reservations must also be made in respect of empowerments, based on the same broad statutory term, to promulgate regulations for concretizing the balancing standards. An exception might be the case of constitutive regulation without which an eco-balance obligation does not yet exist.

Where eco-balances are introduced on an experimental basis, the principles concerning experimental legislation could result in alleviations especially as to the constitutional requirement of legal certainty. As a matter of fact, the investigation and prognosis obligations of the legislature or executive are mitigated in such a case. However, it would seem that an experimental introduction of eco-balances must be confined to cases in which the legal consequences of divergent interpretations of what constitutes good eco-balancing are tolerable to affected firms. This may be true of programmatic producer responsibility or disclosure of enterprise-related eco-balances.

Constitutional requirements as to the contents of eco-balance obligations play an important role in cases of LCA imposed on firms, especially where such obligations are coupled with mandatory disclosure. Where eco-balances are used for preparing governmental or administrative decisions, the constitutional questions relating to content are less relevant. Eco-balance obligations in the form of an obligation of firms to adduce the relevant facts also raise the question of the constitutional foundation of the established principle, whereby the state has to find the facts on which it bases its decision *ex officio*.

5 Problems of Implementation

Where eco-balances are prescribed as a method of preparing governmental or administrative decisions, one must determine whether and to what extent they are binding on the decision-maker. A strictly binding effect would not conform with the governmental or administrative obligation to establish the facts on which the decision is to be based, and it would be contrary to the political discretion of the executive.

Moreover, the details of a possible regulation of eco-balances would have to be set forth. This concerns, among others, the kind of law needed (parliamentary act or mere regulation, one horizontal law or several sectorial laws), the performance of eco-balancing (especially development of methods), and, in particular, the institutionalization of participation, transparency and critical review in the eco-balance procedure. As regards the latter problem, it would not

seem advisable to create a strictly consensual eco-balance procedure. Where the government or the administrative agency has to base its decision on the eco-balance, the decision-making prerogative of the government or the administrative agency requires that, in case of conflicts, it can take a decision independently of societal groups. Of course, this does not exclude a simple duty to consider the results of the eco-balance in taking a decision.

A crucial issue that has to be settled in adopting a regulation on eco-balances is the treatment of trade secrets.

The protection of trade secrets is guaranteed by the Federal Constitution. However, this protection does not constitute an absolute bar to disclosure obligations relating to eco-balances. The interest of the affected firms in secrecy and the public interest in a critical review of eco-balances must be weighed against one another. Product-related eco-balances deserve a more extensive protection, for example to the extent that only aggregated or raw data are to be published, than enterprise-related eco-balances. Access of the public to unpublished eco-balances under the Environmental Information Act raises problems only in case of eco-balance obligations of enterprises, not in case of voluntary eco-balances, because the latter are exempt from the Act. An interpretation of the Act which takes account of its purpose can solve the remaining problems, e.g. confining access to files to aggregated or raw data.

6 Conclusion

It is uncertain if and when the present discussion in Germany on the introduction of concepts of eco-balancing into environmental law will lead to concrete legislative initiatives. For the time being, the Federal Government no longer pursues the project of codifying environmental law since its attempt to introduce a First Book of the Environmental Code on the occasion of implementing the IPPC-Directive has failed for alleged lack of legislative competences. Without the code, there might not be sufficient support for an idea viewed by many with major reservation, if not suspicion. However, the discussion on legalizing eco-balances opens perspectives for the future development which should be pursued further.

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